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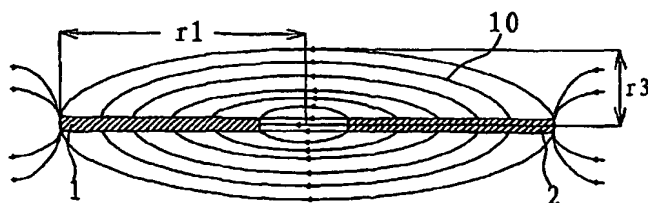
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— 包括国际检索报告。

所引用双字母代码和其它缩写符号, 请参看刊登在每期
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(54) Title: A DEVICE AND METHOD FOR DETECTING THE ENVIRONMENT CHANGE OF WINDSHIELD

(54) 发明名称: 一种检测汽车挡风玻璃环境变化的装置及方法



(57) Abstract: A device for detecting the environmental change of a windshield comprises a plane capacitor which is disposed on the inner surface of the windshield, two electrodes of said plane capacitor are disposed on the same surface, the area of the two electrodes is less than 100 sq.centimetres, said plane capacitor is a sense element which detects the environmental change of windshield and the environmental change after operating, said plane capacitor is electrically connected to a sensor detection circuit, the change signal in capacitance which is affected by the environment is transmitted to said sensor detection circuit, said sensor detection circuit is responsive to the change of capacitance to produce a control signal which controls the device. The structure of this device is simple, the known photoelectric capacitor and a plan capacitor detection device have disadvantages that the measure area is small and the installation is difficult, they can not measure the thickness of rain and be easy to be affected by dirt, they have poor adaptability and the cost is high, said device can solve above-described problems.

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(57) 摘要

本发明涉及一种检测汽车挡风玻璃环境变化的装置及方法，该装置包括在玻璃的内表面上设有一平面电容器，所述平面电容器的两个极板放置在同一平面上，两个所述极板的总面积小于 100 平方厘米，所述平面电容器作为敏感元件以检测挡风玻璃表面的环境变化及操作后带来的环境变化，所述平面电容器与一传感器检测电路电连接，所述平面电容器受外界环境影响而带来的电容量变化的信号传输到所述传感器检测电路，所述传感器检测电路根据所检测的电容量变化产生控制设备工作的控制信号。这种装置结构简单，能够克服现有光电式和平面电容式检测装置存在的测量面积小、不能测量雨水厚度、易受污染物干扰、安装要求过高、适应性差和成本偏高等不足。